



01-20-04

AF/3627  
B  
PTO/SB/21 (08-03)

<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>		Application Number	09/653,498
		Filing Date	August 31, 2000
		First Named Inventor	Heidenreich, Sharon K.
		Art Unit	3627
		Examiner Name	James S. McClellan
Total Number of Pages in This Submission		Attorney Docket Number	020375-021100US

ENCLOSURES (Check all that apply)			
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	
		<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):  Return Postcard	
		Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

**RECEIVED****GROUP 3600**

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual	Townsend and Townsend and Crew LLP Patrick M. Boucher	Reg. No. 44,037
Signature		
Date	January 16, 2004	

**CERTIFICATE OF MAILING**

Express Mail Label: EV 325765348 US

I hereby certify that this correspondence is being deposited with the United States Postal Service with "Express Mail Post Office to Address" service under 37 CFR 1.10 on this date January 16, 2004 and is addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Typed or printed name	Nina L. McNeill		
Signature		Date	January 16, 2004

60120395 v1



# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 330)

Complete if Known

Application Number	09/653,498
Filing Date	August 31, 2000
First Named Inventor	Heidenreich, Sharon K.
Examiner Name	James S. McClellan
Art Unit	3627
Attorney Docket No.	020375-021100US

RECEIVED

JAN 22 2004

GROUP 3600

## METHOD OF PAYMENT (check all that apply)

Check  Credit Card  Money Order  Other  None

Deposit Account:

Deposit Account Number 20-1430

Deposit Account Name Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

- Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	-**	=	Extra Claims	Fee from below	=	Fee Paid
Independent Claims						
Multiple Dependent			X		=	

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity	Fee Code	Fee (\$)	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
	1051	130		2051	65	Surcharge - late filing fee or oath	
	1052	50		2052	25	Surcharge - late provisional filing fee or cover sheet,	
	1053	130		1053	130	Non-English specification	
	1812	2,520		1812	2,520	For filing a request for reexamination	
	1804	920*		1804	920*	Requesting publication of SIR prior to Examiner action	
	1805	1,840*		1805	1,840*	Requesting publication of SIR after Examiner action	
	1251	110		2251	55	Extension for reply within first month	
	1252	420		2252	210	Extension for reply within second month	
	1253	950		2253	475	Extension for reply within third month	
	1254	1,480		2254	740	Extension for reply within fourth month	
	1255	2,010		2255	1,005	Extension for reply within fifth month	
	1401	330		2401	165	Notice of Appeal	
	1402	330		2402	165	Filing a brief in support of an appeal	330
	1403	290		2403	145	Request for oral hearing	
	1451	1,510		1451	1,510	Petition to institute a public use proceeding	
	1452	110		2452	55	Petition to revive – unavoidable	
	1453	1,330		2453	665	Petition to revive – unintentional	
	1501	1,330		2501	665	Utility issue fee (or reissue)	
	1502	480		2502	240	Design issue fee	
	1503	640		2503	320	Plant issue fee	
	1460	130		1460	130	Petitions to the Commissioner	
	1807	50		1807	50	Petitions related to provisional applications	
	1806	180		1806	180	Submission of Information Disclosure Stmt	
	8021	40		8021	40	Recording each patent assignment per property (times number of properties)	
	1809	770		2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
	1810	770		2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
	1801	770		2801	385	Request for Continued Examination (RCE)	
	1802	900		1802	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$330)

## SUBMITTED BY

Complete if applicable

Name (Print/Type)	Patrick M. Boucher	Registration No. (Attorney/Agent)	44,037	Telephone	303-571-4000
Signature				Date	January 16, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.



"Express Mail" Label No. EV325765348US  
Date of Deposit: January 16, 2004

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Address" service under 37 CFR 1.10 on the date indicated above and is addressed to:

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

By: Nina L. McNeill  
Nina L. McNeill

PATENT  
Attorney Docket No.: 020375-021100US  
*JAN 16 2004*

**RECEIVED**

JAN 22 2004

**GROUP 3600**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of:

Sharon K. Heidenreich  
Application No.: 09/653,498  
Filed: August 31, 2000

For: CONTROL SYSTEM AND  
METHOD FOR CURRENCY  
EXCHANGE AND MERCHANDISE  
SALES

Examiner: McClellan, James S.

Art Unit: 3627

APPELLANT BRIEF UNDER 37 CFR  
§1.192

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Appellant offers this Brief further to the Notice of Appeal mailed on November 20, 2003. This Brief is submitted in triplicate as required by 37 CFR §1.192(a).

1. Real Parties in Interest

The real party in interest is First Data Corporation.

01/21/2004 RDATE1 00000093 201430  
09653498  
01 FC:1402 330.00 DA

2. Related Appeals and Interferences

No other appeals or interferences are known that will directly affect, are directly affected by, or have a bearing on the Board decision in this appeal.

3. Status of Claims

Claims 1 – 24 are currently pending in the application. All the claims stand finally rejected by the Examiner. Claims 1, 6, 15, and 17 were previously amended; the remaining claims are as originally filed in the application.

The rejections of Claims 1 – 24 are believed to be improper and are the subject of this appeal. Each of these claims has been finally rejected. A copy of Claims 1 – 24 as rejected is attached as an Appendix.

4. Status of Amendments

No amendments have been filed subsequent to the final rejection mailed July 21, 2003 (paper no. 9).

5. Summary of the Invention

In one embodiment, the claimed invention relates to methods and systems for controlling currency exchange and merchandise sales on a passenger flight (Application, p. 1, ll. 5 – 7). This is accomplished with a security drawer assembly that is removably mounted in a service cart that is stowable on an aircraft and moveable through the cabin of the aircraft (*id.*, p. 5, ll. 4 – 6). The security drawer has locked and unlocked positions that selectively provide access to the security drawer and the security drawer assembly cannot be removed when the security drawer is in the locked position. A detailed description of one embodiment of such a security drawer is provided in U.S. Pat.

No. 6,619,770; this patent is commonly assigned with the current application and was filed concurrently with and incorporated by reference into the current application (*id.*, p. 7, ll. 12 – 14). A copy of U.S. Pat. No. 6,619,770 is attached as Exhibit 1.

There is a generally recognized need in the art for methods and systems that permit currency exchange and merchandise sales on commercial aircraft, such as to enable sales of duty-free and other items, particularly to international travelers (Application, p. 1, ll. 9 – 14). The particular characteristics of commercial aircraft impose a number of limitations of methods and systems for controlling currency exchange with service carts. For example, significant space and weight limitations make it desirable to have a compact design (*id.*, p. 2, ll. 10 – 11). In addition, the design of much equipment on aircraft is subject to government regulations, making it desirable to minimize modifications so that recertification processes may be avoided (*id.*, p. 1, l. 20 – p. 2, l. 5).

Embodiments of the invention enable currency exchange and merchandise sales to be made with existing stowable aircraft carts by removably mounting the security drawer assembly in the cart. Currency inventory is provided in the security drawer, and may be determined by a service provider based on such factors as origin and destination of the flight, aircraft type, passenger load, historical sales penetration, historical transaction amounts, and the like (*id.*, p. 8, ll. 7 – 11). An inventory of merchandise may also be stored in the cart (*id.*, p. 8, ll. 12 – 15). A point-of-sale computer that has data concerning the currency and merchandise inventory is provided to coordinate currency exchanges and merchandise sales effected by aircraft personnel (*id.*, p. 8, l. 15 – p. 9, l. 5).

## 6. Issues

Issue 1: Whether under 35 U.S.C. §103(a) Claims 1 – 6, 10 – 13, and 15 – 24 are unpatentable over U.S. Pat. No. 5,057,677 (hereinafter “Bertagna”) in view of U.S. Pat. No. 6,003,008 (hereinafter “Postrel”). Section 3 beginning on page 2 of the final

Office Action mailed October 21, 2003 (paper no. 9, hereinafter “the final Office Action”) describes the Examiner’s position on this issue.

Issue 2: Whether under 35 U.S.C. §103(a) Claims 7 – 9 are unpatentable over Bertagna in view of Postrel and further in view of U.S. Pat. No. 5,367,452 (“Gallery”). Section 4 on page 6 of the final Office Action describes the Examiner’s position on this issue.

Issue 3: Whether under 35 U.S.C. §103(a) Claim 14 is unpatentable over Bertagna and Postrel and further in view of U.S. Pat. No. 5,873,069 (“Reuhl”).

#### 7. Grouping of the Claims

For purposes of this appeal, the claims are considered as a single group. Appellant reserves the right outside the context of this appeal to argue independent patentability of any grouped claims.

#### 8. Argument

To support a rejection under 35 U.S.C. §103, the Examiner is charged with factually supporting a *prima facie* case of obviousness. Manual of Patent Examining Procedure, Eighth Edition, First Revision, February, 2003 (hereinafter “MPEP”) 2142. Such a *prima facie* case requires, *inter alia*, that all limitations of the claims be taught or suggested by the cited reference(s) and that there be some suggestion or motivation to combine or modify the reference teachings as the Examiner proposes. MPEP 2143. The rejections are deficient in at least both these respects.

The Office Action acknowledges that there is no disclosure in Bertagna of the claim limitations directed to the security drawer (final Office Action, p. 5), relying

exclusively on Postrel for this disclosure. As an initial matter, Appellants note that there appear to be a number of errors in the citations to Postrel so that the basis for the rejections is unclear. For example, the final Office Action cites reference numeral 30 as corresponding to a currency security drawer, but reference numeral 30 of Postrel refers to a side wall of a bill-dispensing unit (*see* Postrel, Col. 3, l. 12), which is clearly not a drawer. The Office Action also cites Col. 15, ll. 10 – 15 of Postrel as showing the security drawer being removably mounted, but Postrel runs only to 8 columns so the citation is clearly erroneous. The Office Action also cites Fig. 3 of Postrel as showing a drawer having locked and unlocked positions in a point-of-sale cart, but Fig. 3 is merely an exploded perspective view of the currency storage and dispensing apparatus shown in Fig. 1 without any clear indication of locked and unlocked positions. In an after-final response filed on September 18, 2003, Appellants requested clarification of how the disclosure of Postrel was being applied, as required by 37 C.F.R. §1.104(c)(2), so that the basis for the rejections could be fully considered. No clarification has been provided in response to that request, and reversal of the rejections is warranted based on these deficiencies in the rejections alone.

As Appellants can best discern, the Office Action is attempting to draw the following correspondence between the claim elements and Postrel: (1) identifying the security drawer recited in the claims with the bill-dispensing unit (20) of Postrel; (2) identifying the security drawer assembly recited in the claim with the dispenser unit (102a – 102h) of Postrel; and (3) identifying the service cart recited in the claim with the currency drawer (100). Such a position is, however, completely untenable. In particular, while claim terms are to be construed broadly during examination, such constructions must be reasonable and consistent with the interpretation that would be reached by those of skill in the art. MPEP 2111. The bill-dispensing unit of Postrel is not reasonably equated with a security “drawer.” A “drawer” is commonly recognized as a horizontal compartment that may be drawn in and out of a structure in gaining access, as evidenced by the definition reproduced from Random House Webster’s College Dictionary (Random House 1997), p. 397 in Exhibit 2. The bill-dispensing unit of Postrel is

configured as a vertical pivoting structure that is completely unlike a “drawer” as that term would be understood to those of skill in the art. Similarly, the currency drawer of Postrel is not reasonably read as corresponding to a service cart that is stowable on an aircraft and moveable through the cabin of an aircraft as the claims require. The currency drawer disclosed in Postrel is not configured with such a capability and the final Office Action fails to cite any evidence of such a capability.

A correspondence is perhaps more naturally attempted between the currency drawer of Postrel and the security drawer recited in the claims. Even with such a correspondence, though, it is plainly evident that there is no disclosure in Postrel of the claim limitations of mounting the currency drawer in a service cart stowable on and moveable through the cabin of an aircraft. In addition, there is no disclosure of the security drawer being part of a removable security drawer assembly that cannot be removed when the security drawer is in the locked position. Since these claim elements are not disclosed in any of the cited art, no *prima facie* case has been established.

Furthermore, the final Office Action fails to establish the required motivation to combine the teachings of Bertagna with those of Postrel, offering only the hindsight observation that “a security drawer protects currency from theft” (final Office Action, p. 5). The Court of Appeals for the Federal Circuit has repeatedly emphasized the need to apply the requirement that there be a motivation to combine references rigorously, cautioning that such rigor is “the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis.” *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Circ. 1999). “The need for specificity pervades this authority.” *In re Lee*, 61 USPQ2d 1430, 1433 (Fed Cir. 2002).

In this instance, the Examiner would like to combine Bertagna, which is directed to a transaction monitoring system, with Postrel, which is directed to a currency storage device. The transaction monitoring and security control in Bertagna is achieved with a portable transaction monitoring unit (PTMU) that may interface with a cart and securely record details of transactions (Bertagna, Col. 2, l. 40 – Col. 3, l. 23); there is no disclosure of the mechanics of dealing with cash or any recognition of security issues that

might surround handling cash, other than to monitor the transactions closely with the PTMU. Similarly, while Postrel describes a currency storage device, it provides no disclosure to suggest integrating such a device with an aircraft service cart. There is accordingly no teaching or suggestion in the references that would motivate one to combine their teachings. It is respectfully believed that the final Office Action provides no "expla[nation of] the reasons one of ordinary skill in the art would have been motivated *to select the references and to combine them* to render the claimed invention obvious." *In re Rouffet*, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998, emphasis added).

For at least these reasons, the claims are believed to be patentable.

9. Conclusion

Appellant believes that the above discussion is fully responsive to all grounds of rejection set forth in the application. Please deduct the requisite fee of \$320.00 pursuant to 37 C.F.R. §1.17(c) from Deposit Account 20-1430 and any additional fees that may be due in association with the filing of this Brief.

Respectfully submitted,

  
Patrick M. Boucher  
Reg. No. 44,037

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 303-571-4000  
Fax: 415-576-0300  
PMB:pmb  
60105412 v1

**APPENDIX**

The claims pending in the application are as follows:

1. (Previously Presented) A system for controlling currency exchange and merchandise sales on an aircraft with a passenger load, which comprises:
  - a) a service cart;
  - b) a security drawer assembly removably mounted in the service cart, wherein the security drawer assembly includes a security drawer having locked and unlocked positions selectively providing access thereto and such that the assembly cannot be removed when the security drawer is in the locked position ;
  - c) a currency inventory including at least two different currencies stored in said security drawer;
  - d) an inventory of merchandise stowed in the service cart;
  - e) the service cart being stowable on the aircraft and movable through the cabin thereof;
  - f) a point-of-sale computer receiving currency and merchandise inventory data; and
  - g) said point-of-sale computer being operable by a flight attendant to record transactions with said merchandise and said currency.
2. (Original) The system according to claim 1, which includes:
  - a) a processing computer adapted to receive transactional data from said point-of-sale computer.
3. (Original) The system according to claim 2, which includes:
  - a) a data card adapted to receive inventory data from said processing computer and transferring same to said point-of-sale computer.

4. (Original) The system according to claim 3, which includes:

- a) said data card comprising a currency data card; and
- b) a merchandise data card adapted to receive data pertaining to said merchandise inventory and transferring same to said point-of-sale computer.

5. (Original) The system according to claim 4, which includes:

- a) said point-of-sale computer recording currency exchange and merchandise sales transaction data on said currency and merchandise data cards respectively for transferring same to said processing computer.

6. (Previously Presented) A method of controlling currency exchange and merchandise sales on a passenger flight with a service cart located in the aircraft cabin, which comprises the steps of:

- a) providing a removable security drawer assembly in said service cart, wherein the security drawer assembly includes a security drawer with a locked position in said service cart and an unlocked position providing access thereto such that the assembly cannot be removed when the security drawer is in the locked position;
- b) providing an inventory of currency in said security drawer;
- c) providing an inventory of merchandise in said service cart;
- d) providing a point-of-sale computer; and
- e) loading said point-of-sale computer with data corresponding to said currency inventory and said merchandise inventory.

7. (Original) The method according to claim 6, which includes the additional step of:

- a) determining a pre-flight currency inventory based on historical currency transaction data from previous flights.

8. (Original) The method according to claim 6, which includes the additional step of:

- a) determining a pre-flight merchandise inventory for the service cart based on historical merchandise sales data.

9. (Original) The method according to claim 7, which includes the additional steps of:

- a) loading currency inventory data on a data card pre-flight with a cash/currency processing computer;
- b) installing said card in said point-of-sale computer; and
- c) downloading data from said data card to said point-of-sale computer.

10. (Original) The method according to claim 6, which includes the additional steps of:

- a) recording currency exchange and merchandise sales transactions on said point-of-sale computer in-flight;
- b) inventorying said currency and merchandise inventories post-flight;
- c) reconciling the post-flight currency and merchandise inventories with the currency and merchandise data on the point-of-sale computer; and
- d) generating an end-of-flight report of currency and merchandise transactions during said flight.

11. (Original) The method according to claim 6, which includes the additional steps of:

- a) maintaining foreign currency exchange information for multiple airlines;
- b) programming said point-of-sale computer with foreign currency exchange information specific to a particular airline.

12. (Original) The method according to claim 6, which includes the additional steps of:

- a) maintaining foreign currency exchange information for multiple airline flights; and
- b) programming said point-of-sale computer with foreign currency exchange information specific to a particular flight.

13. (Original) The method according to claim 6, which includes the additional steps of:

- a) maintaining multiple foreign currency exchange rates; and
- b) programming said point-of-sale computer with said foreign currency exchange rates.

14. (Original) The method according to claim 13, which include the additional steps of:

- a) maintaining flight crew foreign currency exchange discount rates; and
- b) programming said point-of-sale computer with said flight crew foreign currency exchange discount rates.

15. (Previously Presented) The method according to claim 6, which includes the additional steps of:

- a) maintaining information specific to a cash bag for a particular flight; and
- b) transferring to a currency data card data pertaining to said cash bag for transfer to said point-of-sale computer.

16. (Original) The method according to claim 6, which includes the additional steps of;

- a) providing the flight crew with currency exchange rate information; and

b) the flight crew announcing to the passengers the currency exchange rate information.

17. (Previously Presented) The method according to claim 15, which includes the additional step of;

a) reconciling end-of-flight contents of the cash bag with the processing computer.

18. (Original) The method according to claim 6, which includes the additional steps of;

a) conducting a physical inventory of the currency in the security drawer and the merchandise in the cart;  
b) reconciling the physical inventory with currency exchange and merchandise sales transactions recorded by said point-of-sale computer.

19. (Original) The method according to claim 6, which includes the additional step of providing a flight summary report identifying currency, travelers' check and credit card transactions.

20. (Original) The method according to claim 6, which includes the additional steps of:

a) providing a transaction detail report of currency exchange transactions; and  
b) providing a transaction detail report of merchandise sales transactions.

21. (Original) The method according to claim 20, wherein said merchandise comprises duty-free merchandise.

22. (Original) The method according to claim 6, which includes the additional step of providing an over and short (exceptions) report of overages and shortages with respect to said remaining currency and merchandise inventories.

23. (Original) The method according to claim 6, which includes the additional step of creating a transactional history file of said currency exchange and merchandise sale transactions.

24. (Original) The method according to claim 6, which includes the additional step of creating an archive file of data from currency exchange and merchandise sales transactions.